

TMC Clearinghouse Development and Initiation Sample Facilities Database

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Texas Transportation Institute
Center for Professional Development

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Database Structure

Pages 2 shows the data table structures for the TMC facility inventory database. There are 4 data tables associated with this section of the web site. The main file is **TMC_Facility**. This file contains a record for each TMC facility. **TMC_Facility_Standard** is used to describe every ITS standard that is being used or planned to be used by each TMC. There can be many of these records for each TMC facility record. **TMC_Standard_Lookup** is related to the previous table. It gives the name of the standard being used. **TMC_Facility_Technology** is a table that describes the various technologies employed for each TMC in the primary table. There can be many of these records for each TMC facility record.

Pages 3-11 illustrate items that have been entered into the databases. The sample data include the TMCs located in the State of Texas. Some of the data included were obtained from the Oak Ridge National Laboratory/FHWA survey of TMCs. Some data were added as part of the efforts of this project.

TMC_Facility					
Column Name	Required	Туре	Comments		
FACILITY_ID	Υ	NUMBER(20)	Computer generated		
			sequence number		
FACILITY_OWNER		VARCHAR2(255)	Facility Owner		
FACILITY_NAME		VARCHAR2(255)	Facility Name		
METRO_AREA		VARCHAR2(200)	Metro Area TMC monitoring		
PHYSICAL_ADDR_CITY		VARCHAR2(50)	Physical address City		
PHYSICAL_ADDR_STATE		VARCHAR2(10)	Physical address state		
TMC_CONTACT_ID		NUMBER(20)	Link to the Contact person		
GC_FACILITY_TYPE		NUMBER(20)	Facility Type		
WEB_SITE_LINK		VARCHAR2(200)	URL for this facility		
IND_DOT_WEBSITE		VARCHAR2(1)	Indicator if the URL is a DOT		
			site		
NUMBER_FULL_TIME_STAFF		NUMBER(10)	Number of full time staff		
NUMBER_PART_TIME_STAFF		NUMBER(10)	Number of part time staff		
OPERATING_HOURS		VARCHAR2(200)	Operating hours		
MILES_FREEWAY_COVERED		NUMBER(10,3)	Miles of freeway covered		
MILES_ARTERIAL_COVERED		NUMBER(10,3)	Miles of arterial covered		
DATE_CREATED	Υ	DATE	Date record was created		
DATE_MODIFIED		DATE	Date record was last modified		

TMC_Facility_Standard					
Column Name	Required	Туре	Comments		
TMC_FACILITY_ID	Υ	NUMBER(20)	Link to TMC Facility record		
TMC_STANDARD_CODE	Υ	VARCHAR2(10)	Link to TMC Standard Lookup record		
IND_USING	Υ	VARCHAR2(1)	Indicator if the standard is currently using		
IND_CONSIDERING	Υ	VARCHAR2(1)	Indicator if the standard is considered to be used		
DATE_CREATED	Υ	DATE	Date record was created		
DATE_MODIFIED		DATE	Date record was last modified		

TMC_Standard_Lookup						
Column Name	Required	Туре	Comments			
STANDARD_CODE	Υ	VARCHAR2(10)	Code			
DESCRIPTION	Υ	VARCHAR2(255)	Description			
CATEGORY		VARCHAR2(50)	Category			
GROUPING_CODE		VARCHAR2(5)	Grouping Code			
DATE_CREATED	Υ	DATE	Date record was created			
DATE_MODIFIED		DATE	Date record was last modified			

TMC_Facility_Technology						
Column Name	Required	Туре	Comments			
TMC_FACILITY_ID	Υ	NUMBER(20)	Link to TMC Facility record			
GC_TECHNOLOGY_CODE	Υ	NUMBER(20)	Technology used			
DATE_CREATED	Υ	DATE	Date record was created			
DATE_MODIFIED		DATE	Date record was last modified			

Facility ID 3 Facility Owner Texas Department of Transportation

Facility Name DalTrans

Metro Area Dallas, Fort Worth

Physical Addr City Dallas Physical Addr State TX

Contact NameBacon, Robert 214-320-3327 E-Mail rbacon@dot.state.tx.us **Phone**

Facility Type Free-standing building dedicated to TMC activities

Web Site Link http://dfwtraffic.dot.state.tx.us

Number Full Time Staff 18 Number Part Time Staff 0

Operating Hours 5:00 a.m. to 9:30 p.m. Monday - Friday

Miles Freeway Covered 200 Miles Arterial Covered

Standard

ASTM E2259-03 -Standard Guidelines for Archiving

ASTM E-17.54.02.1 Standard Specifications for Metadata Content for ITS-Generated Data

ASTM E-17.54.02.2 Standard Specifications for Archiving ITS-Related Traffic Monitoring Data

ITE 9603-1 - Application Programming Interface (API) Standard for the Advanced Transportation Controller (ATC)

ITE 9603-2 - Advanced Transportation Controller (ATC) Cabinet

ITE 9603-3 - Advanced Transportation Controller (ATC) Standard

Specification for the Type 2070 Controller

SAE J2354 - Message Set for Advanced Traveler Information System (ATIS)

SAE J2540-2 - ITIS Phrase Lists (International Traveler Information Systems)

SAE J2630 - Converting ATIS Message Standards from ASN.1 to **XML**

ITE TM 1.03 - Standard for Functional Level Traffic Management Data Dictionary (TMDD)

ITE TM 2.01 - Message Sets for External TMC Communication (MS/ETMCC)

NTCIP 1602 - Generic Reference Model for C2C Communications

NTCIP 1203 - Object Definitions for Dynamic Message Signs

NTCIP 1204 - Object Definitions for Environmental Sensor **Stations**

NTCIP 1205 - Objects for CCTV Camera Control

NTCIP 1206 - Object Definitions for Data Collection and Monitoring (DCM) Devices

NTCIP 1207 - Object Definitions for Ramp Meter Control

NTCIP 1208 - Object Definitions for Video Switches

NTCIP 1209 - Object Definitions for Transportation Sensor System

NTCIP 1213 - Electrical and Lighting Mgmt System Interoperability & Intercommunications Std

NTCIP 1301 - Weather Report Message Set for ESS

IEEE 1512-2000 Standard for Common Incident Management

Message Sets for use by Emergency Management Centers

IEEE P1512.1 - Standard for Traffic Incident Management

Message Sets for Use by EMCs

IEEE P1512.2 - Standard for Public Safety Incident Management

Message Sets for Use by EMCs

Technology

Acoustic detectors

Loop detectors

Microwave radar

Probe readers for transit vehicles

Probe readers using ETC tags

Probe readers using other technology

Video imaging detectors

Facility ID 3

Facility Owner Texas Department of Transportation

Facility Name DalTrans

Metro Area Dallas, Fort Worth

Standard

IEEE 1512.3-2000 - Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers

IEEE 1512.4 - Standard for Emergency Management to

Emergency Vehicle Subsystems Use by Emergency Management Centers

IEEE P1556 - Standard for Security and Privacy of

Vehicle/Roadside Communication Including Smart Card Comm.

SAE J2266 - Location Referencing Message Specification

NTCIP 1201 - Global Object Definitions

NTCIP 1102 - Octet Encoding Rules (OER)

NTCIP 1103 - Transportation Management Protocol

NTCIP 1104 - CORBA Naming Convention Specification

NTCIP 1105 - CORBA Security Service Specification

NTCIP 1106 - CORBA Near-Real Time Data Service Specification

NTCIP 2101 - Point to Multi-Point Protocol Using RS-232

Subnetwork Profile

NTCIP 2102 - Subnetwork Profile for PMPP using FSK Modems

NTCIP 2103 - Subnet Profile for Point-to-Point Protocol using RS 232

NTCIP 2104 - Subnetwork Profile for Ethernet

NTCIP 2201 - Transportation Transport Profile

NTCIP 2202 - Transport Profile for Internet (TCP/IP and UDP)

NTCIP 2301 - Application Profile for Simple Transportation

Management Framework (STMF)

NTCIP 2302 - Application Profile for Trivial File Transfer Protocol

NTCIP 2303 - Application Profile for File Transfer Protocol (FTP)

NTCIP 2304 - Application Profile for Data Exchange ASN.1 (DATEX)

NTCIP 2305 - Application Profile for Common Object Request

Broker Architecture (CORBA)

NTCIP 8003 - Profiles - Framework and Classification of Profiles

NTCIP 9010 - XML Standard for Center-to-Center

Communications

IEEE P1488 - IEEE Standard for Message Set Template for

Intelligent Transportation Systems

IEEE P1489 - IEEE Standard for Data Dictionaries for Intelligent

Transportation Systems - Part 1 Functional Area Data Dictionaries

NTCIP 1202 - Object Definitions for Actuated Traffic Signal

Controller Units

NTCIP 1210 - Objects for Signal Systems Master

NTCIP 1211 - Objects for Signal Control Priority

Facility ID 18 Facility Owner Texas Department of Transportation

Facility Name TransGuide Metro Area San Antonio

Physical Addr City San Antonio Physical Addr State TX

Contact NameFariello, Brian Phone 210-731-5248 E-Mail bfariel@dot.state.tx.us

Facility Type

Web Site Link http://www.transguide.dot.state.tx.us

Number Full Time Staff 0 Number Part Time Staff 0

Operating Hours

Miles Freeway Covered 140 Miles Arterial Covered

Standard

ITE TM 1.03 - Standard for Functional Level Traffic Management Data Dictionary (TMDD)

NTCIP 1203 - Object Definitions for Dynamic Message Signs

NTCIP 1205 - Objects for CCTV Camera Control

NTCIP 1208 - Object Definitions for Video Switches

NTCIP 1209 - Object Definitions for Transportation Sensor System

Technology

Acoustic detectors

Loop detectors

Microwave radar

Probe readers for transit vehicles

Probe readers using ETC tags

Probe readers using other technology

Video imaging detectors

Ramp Meters

Highway Advisory Radio(HAR)

Facility ID 46 Facility Owner Texas Department of Transportation

Facility Name TransVISION

Metro Area Dallas, Fort Worth

Physical Addr City Fort Worth Physical Addr StateTX

Contact NameNguyen, Tai Phone 817-370-6624 E-Mail tnguy@dot.state.tx.us

Facility Type

Web Site Link http://dfwtraffic.dot.state.tx.us

Number Full Time Staff 0 Number Part Time Staff 0

Operating Hours

Miles Freeway Covered 31 Miles Arterial Covered

Standard

SAE J2354 - Message Set for Advanced Traveler Information System (ATIS)

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(DATEX)

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Technology

Acoustic detectors

Loop detectors

Microwave radar

Probe readers for transit vehicles

Probe readers using ETC tags

Probe readers using other technology

Video imaging detectors

Centrally Controlled Ramp Meters

Ramp Meters

Facility ID 96 Facility Owner Texas Department of Transportation

Facility Name TxDOT Austin District TMC

Metro Area Austin

Physical Addr City Austin Physical Addr StateTX

Contact NameBurk, Brian 512-832-7014 E-Mail bburk@dot.state.tx.us **Phone**

Facility Type Building shared with other activities

Web Site Link

Number Full Time Staff 6 Number Part Time Staff 5

Operating Hours 6am-10pm, m-f

Miles Freeway Covered 32 Miles Arterial Covered

Standard

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Message Sets for Use by EMCs

IEEE P1512.2 - Standard for Public Safety Incident Management

Message Sets for Use by EMCs

Technology

Acoustic detectors

Loop detectors

Microwave radar

Probe readers for transit vehicles

Probe readers using ETC tags

Probe readers using other technology

Video imaging detectors

Facility ID 96

Facility Owner Texas Department of Transportation

Facility Name TxDOT Austin District TMC

Metro Area Austin

Standard

IEEE 1512.3-2000 - Standard for Hazardous Material Incident Management Message Sets for Use by Emergency Management Centers

IEEE 1512.4 - Standard for Emergency Management to

Emergency Vehicle Subsystems Use by Emergency Management Centers

IEEE P1556 - Standard for Security and Privacy of

Vehicle/Roadside Communication Including Smart Card Comm.

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NTCIP 2202 - Transport Profile for Internet (TCP/IP and UDP)

NTCIP 2301 - Application Profile for Simple Transportation

Management Framework (STMF)

NTCIP 2302 - Application Profile for Trivial File Transfer Protocol

NTCIP 2303 - Application Profile for File Transfer Protocol (FTP)

NTCIP 2304 - Application Profile for Data Exchange ASN.1 (DATEX)

NTCIP 2305 - Application Profile for Common Object Request

Broker Architecture (CORBA)

NTCIP 8003 - Profiles - Framework and Classification of Profiles

NTCIP 9010 - XML Standard for Center-to-Center

Communications

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IEEE P1489 - IEEE Standard for Data Dictionaries for Intelligent

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NTCIP 1202 - Object Definitions for Actuated Traffic Signal Controller Units

NTCIP 1210 - Objects for Signal Systems Master

NTCIP 1211 - Objects for Signal Control Priority

Facility ID 123 Facility Owner Texas Department of Transportation

Facility Name TranStar

Metro Area Houston, Galveston, Brazoria

Physical Addr City Houston Physical Addr StateTX

Contact Name Allen, Carlton Phone 713-881-3285 E-Mail callen@houstontranstar.org

Facility Type Building shared with other activities
Web Site Link http://www.houstontranstar.org

Number Full Time Staff 26 Number Part Time Staff 0

Operating Hours 24 hours a day Miles Freeway Covered 460

Miles Arterial Covered

Standard

Technology

Acoustic detectors Loop detectors Microwave radar

Probe readers for transit vehicles
Probe readers using ETC tags

Probe readers using other technology

Video imaging detectors Isolated Ramp Meters

Centrally Controlled Ramp Meters

Ramp Meters

Highway Advisory Radio(HAR)

Facility ID 127 Facility Owner Texas Department of Transportation

Facility Name TransVista

Metro Area El Paso

Physical Addr City El Paso Physical Addr StateTX

Contact NameDe La Garza, Victor Phone 915-790-4346 E-Mail vdelag@dot.state.tx.us

Facility Type Free-standing building dedicated to TMC activities

Web Site Link http://www.transvista.dot.state.tx.us

Number Full Time Staff 5 Number Part Time Staff 4

Operating Hours

Miles Freeway Covered 74 Miles Arterial Covered

Standard

NTCIP 1602 - Generic Reference Model for C2C Communications

NTCIP 1203 - Object Definitions for Dynamic Message Signs

NTCIP 1205 - Objects for CCTV Camera Control

NTCIP 1208 - Object Definitions for Video Switches

NTCIP 2101 - Point to Multi-Point Protocol Using RS-232

Subnetwork Profile

NTCIP 2103 - Subnet Profile for Point-to-Point Protocol using RS

232

NTCIP 9010 - XML Standard for Center-to-Center

Communications

Technology

Acoustic detectors

Loop detectors

Microwave radar

Probe readers for transit vehicles

Probe readers using ETC tags

Probe readers using other technology

Video imaging detectors

Lane Management

Facility ID 146 Facility Owner Texas Department of Transportation

Facility Name PEGASIS Metro Area Amarillo

Physical Addr City Amarillo Physical Addr StateTX

Contact Name, Phone E-Mail

Facility Type

Web Site Link http://amaits.dot.state.tx.us

Number Full Time Staff

Number Part Time Staff

Operating Hours

Miles Freeway Covered Miles Arterial Covered

Standard Technology

Count: 7